

PSC Monitoring of NorthWestern Energy's Maintenance Practices

On March 13, 2003 NorthWestern Energy filed its Maintenance Plan and Budget Compliance report pursuant to Order No. 6474a in Docket No. D2002.12.159. That Order states: "Approval of this application requires an ongoing commitment to fully fund comprehensive operation, maintenance repair and replacement of its public utility infrastructure in Montana."

On July 29, 2003 the PSC staff at the direction of the Commission sent a letter to NWE requesting that the Company provide monthly updates of monies actually spent correlated back to the March 13, 2003 Maintenance Plan and Budget Compliance report.

On August 13, 2003 the Montana Consumer Counsel filed a request that the PSC open an investigation to investigate NorthWestern Energy's financial and related transactions with NorthWestern Corporation, its affiliates and creditors. On August 29, 2003 the Commission voted to accept MCC's request to open the investigation. As a part of the filing MCC asked the following discovery on the subject of maintenance:

- i. Provide the maintenance plan and budget
- ii. Provide each change to the maintenance plan and budget
- iii. Assess the current status of the Company's implementation of the maintenance plan and budget
- iv. What service quality metrics does the Company presently use to assess the adequacy of its service, and provide all records relating to such metrics for the past 15 months
- v. Provide copies of the Company's current manuals, policies and procedures for facilities maintenance and replacement
- vi. Itemize by account number from the Uniform System of Accounts (18 C.F.R. Part 101): (a) the amounts expended by the Company on operation, maintenance, repair and replacement activities since January 27, 2003 and December 31, 2003; (b) the amounts scheduled to be expended by the Company on those activities between August 1, 2003 and December 31, 2003; (c) the amounts required to be expended to bring the Company into compliance with the

objectives and targets set forth in its maintenance plan and budget; (d) the amounts estimated by the Company to be required to bring the Company's transmission and distribution systems into a state of compliance with each applicable safety and reliability code and criterion (NERC NAERO, WECC, National Electrical Code, National Electric Safety Code, etc.).

NorthWestern Energy responded to the MCC questions on September 5, 2003. Attached are the Reliability Performance Measures supplied by NorthWestern Energy.

Reliability Performance Measures

Total Number of Interruptions "Outage Counts"

The total number of interruptions is a simple record of the number of interruptions which occurred in a given time frame.

SAIDI for Total of Interruptions (System Average Interruption Duration Index)

SAIDI is the average total duration of interruptions of supply that a customer experiences in the period. The SAIDI for the total of interruptions is the sum obtained by adding together the interruption duration factors for all interruptions *divided by* the total customers.

$$\text{SAIDI} = \frac{\text{Sum of [No. of Interrupted Customers x Interruption Duration]}}{\text{Total Number of Connected Customers in minutes/connected customer/year}}$$

SAIFI for the Total Number of Interruptions (System Average Interruption Frequency Index)

SAIFI is the average number of interruptions of supply that a customer experiences in the period. The SAIFI for the total number of interruptions is the sum obtained by adding together the number of electricity customers affected by each of those interruptions *divided by* the total customers.

$$\text{SAIFI} = \frac{\text{Sum of [No. of Interrupted Customers]}}{\text{Total Number of Connected Customers in interruptions/connected customer/year}}$$

CAIDI for the Total of All Interruptions (Customer Average Interruption Duration Index)

CAIDI is the average duration of an interruption of supply for customers who experienced an interruption of supply in the period. The CAIDI for the total of all interruptions is the sum obtained by adding together the interruption duration factors for all interruptions *divided by* the sum obtained by adding together the number of electricity customers affected by each of those interruptions.

$$\text{CAIDI} = \frac{\text{Sum of [No. of Interrupted Customers x Interruption Duration]}}{\text{Sum of [No. of Interrupted Customers] in minutes/customer interrupted}}$$